

Michigan's Cyber Schools, 2010 to 2013

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Since 2010, Michigan students have an option to no longer attend a brick and mortar building and instead enroll in school where all classes are delivered online. Cyber schools offer students new ways to learn – at their own pace and in their own homes. Parents select cyber schools for reasons different from traditional schools, making cyber school students unique when compared to other students.

Cyber schools are subject to the same rules that govern other charter schools in Michigan. Although, there is still little information available to evaluate the academic success of Michigan's cyber schools, there is data on mobility rates. The mobility rates do offer one glimpse at how parents are evaluating the first generation of online learning programs.

Since the opening of the first cyber schools in 2010, the number of cyber schools and students attending those schools has dramatically increased. In the first year, there were two schools enrolling 733 students; in 2013, there were eight schools enrolling 6,863 students. This figure is still far below the 2 percent cap imposed by state statute (approximately 30,000 students using 2013 fall enrollment).

Table 1: Growth of Cyber School Enrollment, 2010 to 2013

Year 2010														
Building Name	Grade													Total
	K	1	2	3	4	5	6	7	8	9	10	11	12	
Michigan Connections Academy	25	26	35	26	42	41	40	28	35	52	28	18	4	400
Michigan Virtual Charter Academy	33	31	33	36	39	34	30	51	46	0	0	0	0	333
Total	58	57	68	62	81	75	70	79	81	52	28	18	4	733
Year 2011														
Building Name	Grade													Total
	K	1	2	3	4	5	6	7	8	9	10	11	12	
Michigan Virtual Charter Academy	55	43	35	41	42	39	43	69	75	73	46	62	61	684
Michigan Connections Academy	38	54	52	49	53	64	47	50	59	65	31	25	7	594
FAM Academy of Detroit	0	0	0	0	0	0	0	0	0	73	42	13	3	131
Total	93	97	87	90	95	103	90	119	134	211	119	100	71	1,409
Year 2012														
Building Name	Grade													Total
	K	1	2	3	4	5	6	7	8	9	10	11	12	
Michigan Virtual Charter Academy	62	84	89	62	62	62	65	123	112	110	55	43	31	960
Michigan Connections Academy	36	42	67	60	59	76	88	79	90	69	44	22	14	746
FAM Academy of Detroit	0	0	0	0	0	0	0	0	0	3	73	26	34	136
Total	98	126	156	122	121	138	153	202	202	182	172	91	79	1,842
Year 2013														
Building Name	Grade													Total
	K	1	2	3	4	5	6	7	8	9	10	11	12	
Michigan Virtual Charter Academy	204	207	232	240	282	277	334	400	511	711	487	355	198	4,438
Michigan Connections Academy	72	84	71	102	105	127	153	173	173	232	149	91	41	1,573
Michigan Great Lakes Virtual Academy	15	13	21	19	16	27	19	27	39	62	56	45	28	387
ICademy	11	12	17	18	9	16	24	15	18	21	18	16	18	213
Great Lakes Cyber School	0	0	0	0	0	0	0	0	0	82	58	37	16	193
FAM Academy of Detroit	0	0	0	0	0	0	0	0	0	0	11	7	7	25
Mosaica Online Academy of Michigan	0	1	1	1	2	1	3	1	3	1	3	2	1	20
Life Tech Academy	0	0	0	0	0	0	0	0	5	5	2	1	1	14
Total	302	317	342	380	414	448	533	616	749	1,114	784	554	310	6,863

Almost four times more students enrolled in cyber schools in 2013 than in 2012. In 2013, 65 percent “attended” Michigan Virtual Charter Academy (MVCA) and 23 percent “attended” Michigan Connections Academy (MCA). The largest number of students attended 8th, 9th and 10th grades. Table 2 shows the proportion of high school students is greater in cyber schools than in traditional public schools or other types of charter schools.

Table 2: Distribution of students in 2013

	9-12	K-8
Cybers	41%	59%
Traditional Public Schools	33%	67%
Charter schools (minus cybers)	19%	81%

Students in cyber schools are more likely to enroll for high school grades (41 percent of cyber students, compared to 33 percent in traditional public schools, and 19 percent in other charter schools). Cyber students are less likely to enroll in K-8 grades (59 percent of students in cybers compared to 67 percent in traditional public schools and 81 percent in charter schools).

Table 3 shows the racial/ethnic distribution of students who applied, then reapplied, for admission to cyber schools for the following school year.

Table 3: Applications for admission to cyber schools

	Ethnicity	Cohort of 2009		Cohort of 2010		Cohort of 2011		Cohort of 2012	
		N	%	N	%	N	%	N	%
Applied to enroll in a cyber school for the following year	White	487	65%	609	42%	775	40%	4,242	60%
	African American	129	17%	259	18%	288	15%	1,073	15%
	Multiracial	84	11%	68	5%	53	3%	252	4%
	Asian and Pacific Islander	22	3%	35	2%	48	3%	120	2%
	American Indian	11	1%	11	1%	15	1%	79	1%
	Hispanic	0	0%	1	0%	0	0%	13	0%
Continued at a cyber school for a second year	White			291	20%	442	23%	730	10%
	African American			82	6%	156	8%	232	3%
	Asian and Pacific Islander			16	1%	24	1%	54	1%
	Multiracial			34	2%	35	2%	51	1%
	American Indian			3	0%	5	0%	16	0%
	Hispanic			0	0%	1	0%	1	0%
	Total	755	100%	1,460	100%	1,914	100%	7,037	100%

Sixty percent of applicants to cyber schools for 2013 were White and 15 percent were Black. White students are more likely to reenroll for a second year.

Using data from the first three cohorts (2010, 2011, and 2012) at MCA and MVCA and FAM Academy, we can see the mobility rate of students. In the first two cohorts, the majority of students either dropped out of the cyber or stayed for only one year.

Table 4: Mobility of Students in Michigan's First Cyber Schools

Table 4: Mobility of Students in Michigan's First Cyber Schools						
Length of time in the cyber	Michigan Connections Academy (MCA)			Michigan Virtual Charter Academy (MVCA)		FAM Academy of Detroit
	K-8	9-12		K-8	9-12	
Cohort of 2010						
	100%	100%			100%	
3 years	28%	10%			22%	
2 years	8%	11%			10%	
1 year	26%	36%			23%	
Less than 1 year	38%	43%			45%	
Cohort of 2011						
	100%	100%		100%	100%	100%
2 years	43%	24%		41%	11%	8%
1 year	15%	24%		16%	15%	16%
Less than 1 year	42%	52%		43%	75%	76%
Cohort of 2012						
	100%	100%		100%	100%	100%
1 year	69%	62%		64%	41%	16%
Less than 1 year	31%	38%		36%	59%	84%

The majority of students in the first cohort of students (2010) left either before the first year finished or at the end of the first year. In the first cohort of students, at MCA, 64 percent of K-8 students and 79 percent of high school students attended one year or less; at MVCA, 65 percent of high school students attended one year or less. In the second cohort of 2011, 57 percent of K-8 and 76 percent of high school students at MCA stayed for one year or less; at MVCA, 59 percent of K-8 and 89 percent of high school students stayed more than one year. For the cohort of 2012 in both schools, the percentage of students attending less than one year declined. At FAM Academy of Detroit (now closed), few students remained more than one year.

A disproportionate percentage of cyber students disappear from the state's data system. Table 5 details the students who begin in a cyber-school, leave the school, and cannot be found in the state's record system.

Table 5: Students who leave cyber schools

Table 3: Students who leave cyber schools												
	Michigan Connections Academy (MCA)				Michigan Virtual Charter Academy (MVCA)				FAM Academy of Detroit			
	Grade K - 8		Grade 9 - 12		Grade K - 8		Grade 9 - 12		Grade 9 - 12			
	N	%	N	%	N	%	N	%		N	%	
Cohort of 2010												
Stayed for 2 years	24		11					34				
Stayed from 2010-12 and disapper in 2013	5	21%	10	91%				15	44%			
Stayed for 1 year	78		37					78				
Stayed from 2010-11 and disappeared in 2012	35	45%	24	65%				22	28%			
Stayed less than 1 year	114		44					149				
Disappeared in 2011	41	36%	16	36%				65	44%			
Cohort of 2011												
	#	%	#	%		#	%	#	%		#	%
Stayed for 1 year	70		33			71		36			22	
Stayed from 2011-12 and disapper in 2013	26	37%	22	67%		34	48%	23	64%		14	64%
Stayed less than 1 year	197		70			190		185			104	
Disappeared in 2012	79	40%	44	63%		71	37%	145	78%		94	90%
Cohort of 2012												
	Grade K - 8		Grade 9 - 12			Grade K - 8		Grade 9 - 12			Grade 9 - 12	
Stayed at cyber school less than 1 year	185		57			262		140			114	
Disappeared in 2012	53	29%	39	68%		102	39%	92	66%		88	77%

In the elementary grades, the students who disappear are likely home-school children since they do not show up as registered in another school the following year. High school students may be home schooled or potentially 16 year olds who choose to dropout.

Only the two oldest cybers are included on the state's 2014 Top to Bottom (TtB) list. The TtB rankings for MCA and MVCA are shown in Table 6. Both schools dropped significantly between 2013 and 2014 rankings. The most recent TtB rank suggests that MCA performed better than 25 percent of public schools in Michigan and MVCA performed better than only 4 percent of schools. MCA is identified as a focus school and MVCA is a priority school.

Table 6: Top to Bottom Rankings

Building Name	TtB Rank 2013	TTB Rank 2014
Michigan Connections Academy	55	25
Michigan Virtual Charter Academy	20	4
FAM Academy of Detroit	N/A	closed

The 2014 achievement, improvement and gap z-scores for the two schools are shown in Table 7.

Table 7: 2014 TtB Performance of the MCA and the MVCA

Subject	Michigan Connections Academy			Michigan Virtual Charter Academy		
	Ach Z	Imp Z	Gap Z	Ach Z	Imp Z	Gap Z
Math	-0.13	0.09	-1.32	-0.04	-.36	-1.49
Reading	0.39	0.17	-1.87	-0.12	.86	-2.50
Science	1.01	0.27	-1.55	-0.07	-.21	-1.91
Social Studies	0.43	0.45	-1.82	-0.26	-.31	-1.24
Writing	-0.80	-1.34	-2.05	-1.03	.04	-.57

The achievement z-score tells how well the school performed in a subject. A positive number implies the school performed better than the state average. A negative number implies the schools performed worse than the state average. MCA is better in Reading, Science, and Social Studies than the state average. In no areas did MVCA outperform the state average.

The improvement z-score tells if a school shows improvement on a subject. A positive number means the school shows a greater rate of improvement than the state average; and a negative number means slower rate than the state average. The improvement in MCA was greater than the state average in all subjects except writing. MVCA outperformed the state average in reading and writing.

The gap z-score tells how large the achievement gap is between the top 30 percent and the bottom 30 percent of student on a subject. A positive number means smaller gap than the state average; and a negative number means larger gap. Both scores have large achievement gaps. MCA is identified as a focus school because of the gaps and MVCA would probably also have been identified as a focus school if it wasn't in the bottom 5 percent.

Conclusion

Cyber schools in Michigan are a relatively new form of education. Any evaluation of the success of students will have to wait for additional information. However, it is clear from the student mobility rates for in the first three years of operation, the initial model didn't fit the needs of many parents who expected something different. In their third year of operation, both cybers have dropped significantly in the state rankings with MVCA now identified as in the bottom 5 percent of all schools in the state. All subjects at MVCA have negative z-scores showing students are less proficient than the state average and they have significant achievement gaps compared to the state average in all subjects. The large achievement gaps for both schools indicate both cybers are likely to be serving two disparate populations – both high performing and low performing students.

As the population of cyber school students increases, questions remain about how special education students are funded across ISDs, how to define teacher preparation and quality when instruction is delivered online, should online schools receive the same level of funding as brick and mortar schools, and can instructional practices offered in online instruction be more effectively integrated into traditional or charter schools?

Appendix

Detailed table on the mobility of cyber students in the first 3 cohorts

Cohort of 2010									
	K-8	9-12				9-12			
Michigan Connections Academy (MCA)	100%	100%			Michigan Virtual Charter Academy (MVCA)	100%			
Stayed at MCA for 3 years					Stayed at MVCA for 3 years				
Stayed at MCA from 2010-13	26%	9%			Stayed at MVCA from 2010-13	21%			
Stayed at MCA until 2012 and Moved to another cyber school in 2013	1%	0%			Stayed at MVCA until 2012 and Moved to another cyber school in 2013	0%			
Stayed at MCA until 2011 and Moved to another cyber school in 2013	0%	0%			Stayed at MVCA until 2011 and Moved to another cyber school in 2013	0%			
Moved to another cyber school in 2010-11 and Stayed there in 2013	1%	1%			Moved to another cyber school in 2010-11 and Stayed there in 2013	0%			
Stayed at MCA for 2 years					Stayed at MVCA for 2 years				
Stayed at MCA for 2010-12 and Moved to PSA in 2013	1%	0%			Stayed at MVCA for 2010-12 and Moved to PSA in 2013	1%			
Stayed at MCA for 2010-12 and Moved to LEA in 2013	5%	0%			Stayed at MVCA for 2010-12 and Moved to LEA in 2013	5%			
Stayed at MCA for 2010-12 and Moved to Other in 2013	1%				Stayed at MVCA for 2010-12 and Moved to Other in 2013	0%			
Stayed at MCA from 2010-12 and disapper in 2013	2%	10%			Stayed at MVCA from 2010-12 and disapper in 2013	5%			
Stayed at MCA from 2010-11, Moved to another cyber school in 2012 and leave cyber school in 2013	0%	1%			Stayed at MVCA from 2010-11, Moved to another cyber school in 2012 and leave cyber school in 2013	0%			
Stayed at MCA for 1 year					Stayed at MVCA for 1 year				
Stayed at MCA in 2010-11 and Moved to PSA in 2012	3%	4%			Stayed at MVCA in 2010-11 and Moved to PSA in 2012	4%			
Stayed at MCA in 2010-11 and Moved to LEA in 2012	11%	6%			Stayed at MVCA in 2010-11 and Moved to LEA in 2012	11%			
Stayed at MCA in 2010-11 and Moved to Other in 2012	1%	1%			Stayed at MVCA in 2010-11 and Moved to Other in 2012	1%			
Stayed at MCA in 2010-11 and Disappear in 2012	12%	24%			Stayed at MVCA in 2010-11 and Disappear in 2012	7%			
Moved to another cyber school in 2010-11 and leave in 2012	0%	2%			Moved to another cyber school in 2010-11 and leave in 2012	0%			
Stayed at MCA less than 1 year	%	%			Stayed at MVCA less than 1 year	%			
Moved to PSA in 2011	6%	5%			Moved to PSA in 2011	2%			
Moved to LEA in 2011	18%	22%			Moved to LEA in 2011	22%			
Moved to Other in 2011	0%	1%			Moved to Other in 2011	1%			
Disappear in 2011	14%	16%			Disappear in 2011	20%			
Cohort of 2011									
	K-8	9-12				K-8	9-12		
Michigan Connections Academy (MCA)	100%	100%			Michigan Virtual Charter Academy (MVCA)	100%	100%		
Stayed at MCA for 2 years					Stayed at MVCA for 2 years				
Stayed at MCA from 2011-13	41%	25%			Stayed at MVCA from 2011-13	39%	11%		
Stayed at MCA from 2011-12 and Moved to another cyber school in 2013	2%	0%			Stayed at MVCA from 2011-12 and Moved to another cyber school in 2013	1%	0%		
Moved to another cyber school in 2011 and Stayed there from 2011-13	0%	0%			Moved to another cyber school in 2011 and Stayed there from 2011-13	0%	0%		
Stayed at cyber school for 1 year					Stayed at cyber school for 1 year				
Stayed at MCA from 2011-12 and Moved to PSA in 2013	2%	0%			Stayed at MVCA from 2011-12 and Moved to PSA in 2013	2%	0%		
Stayed at MCA for 2011-12 and Moved to LEA in 2013	7%	2%			Stayed at MVCA for 2011-12 and Moved to LEA in 2013	7%	2%		
Stayed at MCA for 2011-12 and Moved to Other in 2013	1%	1%			Stayed at MVCA for 2011-12 and Moved to Other in 2013	0%	0%		
Stayed at MCA from 2011-12 and disapper in 2013	6%	17%			Stayed at MVCA from 2011-12 and disapper in 2013	8%	10%		
Moved to another cyber school in 2012 and leave in 2013	0%	1%			Moved to another cyber school in 2012 and leave in 2013	0%	0%		
Stayed at cyber school less than 1 year					Stayed at cyber school less than 1 year				
Moved to PSA in 2012	4%	5%			Moved to PSA in 2012	6%	1%		
Moved to LEA in 2012	19%	15%			Moved to LEA in 2012	19%	14%		
Moved to Other in 2012	2%	1%			Moved to Other in 2012	2%	1%		
Disappear in 2012	17%	34%			Disappear in 2012	16%	60%		
Cohort of 2012									
	K-8	9-12				K-8	9-12		
Michigan Connections Academy (MCA)	100%	100%			Michigan Virtual Charter Academy (MVCA)	100%	100%		
Stayed at MCA for 1 year					Stayed at MVCA for 1 year				
Stayed at MCA from 2012-13	67%	61%			Stayed at MVCA from 2012-13	62%	41%		
Moved to another cyber school in 2013	2%	1%			Moved to another cyber school in 2013	2%	1%		
Stayed at cyber school less than 1 year					Stayed at cyber school less than 1 year				
Moved to PSA in 2013	4%	1%			Moved to PSA in 2013	4%	3%		
Moved to LEA in 2013	17%	11%			Moved to LEA in 2013	18%	18%		
Moved to Other in 2013	1%	1%			Moved to Other in 2013	1%	0%		
Disappear in 2013	9%	26%			Disappear in 2013	14%	38%		